### **RESOLUTION NO. 6976**

A RESOLUTION OF THE CITY OF SANTA CLARA MAKING EXPRESS FINDINGS REQUIRED BY SECTION 17958.7 OF THE CALIFORNIA HEALTH AND SAFETY CODE THAT CERTAIN MODIFICATIONS AND AMENDMENTS TO THE FOLLOWING UNIFORM CODES ARE NEEDED FOR THE CITY OF SANTA CLARA AND SETTING FORTH THE JUSTIFICATION FOR THE CHANGES:

- 1) UNIFORM ADMINISTRATIVE CODE (1997 EDITION)
- 2) UNIFORM BUILDING CODE (1997 EDITION)
- 3) NATIONAL ELECTRIC CODE (1999 EDITION)
- 4) UNIFORM HOUSING CODE (1997 EDITION)
- 5) UNIFORM MECHANICAL CODE (2000 EDITION)
- 6) UNIFORM PLUMBING CODE (2000 EDITION)
- 7) UNIFORM CODE FOR THE ABATEMENT OF DANGEROUS BUILDINGS (1997 EDITION)

NOW, THEREFOR, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SANTA CLARA, as follows:

### **SECTION 1: 1997 Uniform Administrative Code.**

That the City Council of the City of Santa Clara hereby expressly finds the modifications and amendments set forth in **Exhibit "A"** necessary for the reasons set forth in Exhibit "A-1." Both exhibits are attached hereto and incorporated by this reference.

### **SECTION 2: 1997 Uniform Building Code.**

That the City Council of the City of Santa Clara hereby expressly finds the modifications and amendments set forth in **Exhibit "B"** necessary for the reasons set forth in Exhibit "B-1." Both exhibits are attached hereto and incorporated by this reference.

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### **SECTION 3:** 1999 National Electric Code.

That the City Council of the City of Santa Clara hereby expressly finds the modifications and amendments set forth in **Exhibit "C"** necessary for the reasons set forth in Exhibit "C-1." Both exhibits are attached hereto and incorporated by this reference.

### **SECTION 4:** 1997 Uniform Housing Code.

That the City Council of the City of Santa Clara hereby expressly finds the modifications and amendments set forth in **Exhibit "D"** necessary for the reasons set forth in Exhibit "D-1." Both exhibits are attached hereto and incorporated by this reference.

### **SECTION 5: 2000 Uniform Mechanical Code.**

That the City Council of the City of Santa Clara hereby expressly finds the modifications and amendments set forth in **Exhibit "E"** necessary for the reasons set forth in Exhibit "E-1." Both exhibits are attached hereto and incorporated by this reference.

### **SECTION 6:** 2000 Uniform Plumbing Code

That the City Council of the City of Santa Clara hereby expressly finds the modifications and amendments set forth in **Exhibit "F"** necessary for the reasons set forth in Exhibit "F-1." Both exhibits are attached hereto and incorporated by this reference.

### SECTION 7: 1997 Uniform Code for the Abatement of Dangerous Buildings.

That the City Council of the City of Santa Clara hereby expressly finds the modifications and amendments set forth in **Exhibit "G"** necessary for the reasons set forth in exhibit "G-1." Both exhibits are attached hereto and incorporated by this reference.

### **SECTION 8:** Public Record of Findings.

That the City Clerk of the City of Santa Clara is hereby authorized and directed to have available at all times as a public record in the City Clerk's office a copy of the findings as to necessity of

the modifications or amendments. The City Clerk is furthermore authorized and directed to

transmit a copy of the findings to be filed with the California Building Standards Commission as

required by Section 17958.7 of the California Health and Safety Code.

I HEREBY CERTIFY THE FOREGOING TO BE A TRUE COPY OF A RESOLTUION

PASSED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF SANTA CLARA,

CALIFORNIA, AT A REGULAR MEETING THEREOF HELD ON THE  $1^{\mathrm{ST}}$  DAY OF

OCTOBER, 2002, BY THE FOLLOWING VOTE:

AYES: COUNCILORS: Diridon, Kolstad, Mahan, Matthews, Parle and

Mayor Nadler

NOES: COUNCILORS: None

ABSENT: COUNCILORS: McLemore

ABSTAINED: COUNCILORS None

ATTEST: J.E. Boccignone

J. E. BOCCIGNONE

City Clerk

City of Santa Clara

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### **EXHIBIT "A"**

### CITY OF SANTA CLARA MODIFICATIONS AND AMENDMENTS TO: THE UNIFORM ADMINISTRATIVE CODE [1997 Edition]

The following modifications and amendments are a part of the Uniform Administrative Code, 1997 Edition. They are to add to, replace, or supersede the respective sections and subsections appearing in such Code prior to such modification.

(A) <u>Section 204.1</u> - **Board of Appeals.** Section 204.1 is hereby amended and superseded to read as follows:

Section 204.1 - Board of Appeals

Appeals from any administrative order or decision under this ordinance shall be processed through a hearing Officer or Hearing Officers designated by the City Manager to serve as the Board of Appeals for all appeals under the rules and regulations provided therefore.

### (B) <u>Section 304.2</u> - Permit Fees.

Section 304.2 is hereby amended and superseded to read as follows:

**Section 304.2 - Permit Fees.** The fee for each permit will be as provided in tables numbered 3-A through 3-H adopted by resolution of the City Council from time to time.

### **Exception:**

1. Fees shall not be required for buildings erected for and owned by the City of Santa Clara, the County of Santa Clara, the State of California and the United States of America.

The determination of value or valuation under any of the provisions of these codes shall be made by the Building Official. The value to be used in computing the building permit and building plan review fees shall be the total value of all construction work for which the permit is issued as well as all finish work, painting, roofing, electrical, plumbing, heating, air-conditioning, elevators, fire-extinguishing systems and other permanent equipment.

### (C) <u>Section 304.3</u> - Plan Review Fees.

The first two paragraphs of Section 304.3 are hereby amended to read as follows:

When submittal documents are required by Section 302.2, a plan review fee, including building, electrical, plumbing and mechanical plan review shall be paid at the time of submitting the submittal documents for plan review. Said plan review fee shall be 75 percent of the building permit fee as shown in Table 3-A.

All of the tables noted in this section are those contained in the resolution referred to in Section 304.2.

**Exception:** Plan review fees may be modified as specified below under the following conditions:

- 1. Special urgency consideration (50% of Table 3-A)
  - (a) Applicant makes application for special consideration for plan review by an approved plan review agency.
  - (b) Applicant to pay additional plan review fees directly to an approved plan review service as approved and on file in the office of the Building Official.
- 2. Multiple or Master Plans previously approved under this code and on file in the office of the Building Official as a Master Plan, including, but not limited to, the following: (25% of Table 3-A)
  - (a) Signs, billboards
  - (b) Structures approved by the International Conference of Building Officials Research Recommendations
  - (c) California State Department of Housing and Community Development Plan Approvals
  - (d) Swimming pools, spas, solar systems, etc.
- 3. Fast track projects which meet the guidelines established by the Building Official for plan review and permit issuance (100% of Table 3-A)
- 4. Title 24 Energy Conservation plan review (20% of Table 3-A).
- 5. The plan review fees for electrical, mechanical and plumbing permit applications without a building permit shall be equal to 25 percent of the total permit fee as set forth in Tables 3-B, 3-C, and 3-D).
- **(D)** <u>Section 304.7</u> Plan Retention Fees. Section 304 shall be amended by adding thereto the following subsection 304.7 to read as follows:

Plans required to be maintained or filed with the City, shall be charged a rate of \$2.00 per sheet of drawing.

### EXHIBIT "A-1"

## CITY OF SANTA CLARA JUSTIFICATION FOR MODIFICATION AND AMENDMENTS TO: THE UNIFORM ADMINISTRATIVE CODE [1997 Edition]

(A) **Section 204.1** - Board of Appeals.

**Justification:** Changes approved by City Council under Resolution No. 6882.

(B) **Section 304.2** - Permit Fees (Same as present code.)

<u>Justification:</u>
1. Provides the City to set fees for permits by a separate resolution and to defray actual costs.

2. Continues past policy of the City of not charging for inspection fees for buildings owned by the City, County, State or Federal entities

(C) Section 304.3 - Plan Review Fees (Same as present code.)

2.

Justification:

1. Simplifies the plan check fee collection process by charging a single fee instead of four separate plan check fees.

Provides a process for speeding up Plan Review. Process upon request by the applicant.

3. Allows for reduction of Plan Review fees where a master plan is on file within the office of the Building Official.

4. Provides for additional Plan Review fees for Fast Track projects which require additional plan review since the permit is issued in stages.

(D) **Section 304.7** - Plan Retention Fees (Same as present code.)

Justification: Section 19852 of the State Health and Safety Code allows the City of Santa Clara to charge for maintaining the official copy of the plans of buildings for which it has issued a building permit.

Justification for Modification and Amendments to: The Uniform Administrative Code [1997 Edition] Page 1 of 1 EXHIBIT "A-1"

#### **EXHIBIT "B"**

### CITY OF SANTA CLARA MODIFICATIONS AND AMENDMENTS TO THE UNIFORM BUILDING CODE [1997 Edition]

The following modifications; and amendments are a part of the Uniform Building Code, 1997 Edition. They are to add to, replace, or supersede the respective sections and subsections appearing in said code prior to such modifications.

### (A) Sections 102 through 109 inclusive Administrative. Not adopted.

### (B) <u>Section 904.1</u> - Fire Extinguishing Systems. (Same as present code.)

Section 904.1 is hereby amended by adding thereto the following:

All fire extinguishing systems shall be installed in accordance with the requirements of the Uniform Fire Code, latest edition, adopted by the City of Santa Clara, or; the requirements of this section; the most restrictive being applicable.

The Uniform Fire Code, as amended by the City, has been filed separately, with justifications for amendments, with the California Building Standards Commission.

### (C) <u>Section 1612.2.1</u> – Basic Load Combinations.

Section 1612.2.1, equation (12-6) is hereby amended to:  $0.9D\pm (1.0\rho E_h \text{ or } 1.3\text{W})$ Note:  $\rho$  and  $E_h$  are defined in Section 1630.

Exception #2 is hereby deleted and Exception #3 is amended to Exception #2.

### (D) Section 1629.4.2 – Seismic Zone 4 near-source factor

Section 1629.4.2, condition number 4 is hereby amended to:

4. The provisions in Sections 9.6a and 9.6b of AISC- Seismic Part 1 shall not apply, except for columns in one-story buildings or columns at the top story of multi-story buildings.

### (E) <u>Section 1629.6.1</u> - General.

Section 1629.6.1 Table 16-N – Structural Systems is hereby amended to:

#### 1997 UNIFORM BUILD CODE

#### TABLE 16-N-5TRUCTURAL SYSTEMS

BASIC STRUCTURAL SYSTEM <sup>2</sup>	LATERAL-FORCE-RESISTING SYSTEM DESCRIPTION	R	Ωο	HEIGHT LIMIT FOR SEISMIC ZONES 3 AND 4 (feet) x 304.8 for mm
Bearing wall system	1. Light framed walls with shear panels			
M secondinal and	a. Wood structural panel walls for structures three stories or less	5.5	2.8	65
	b. All other light-framed walls	4.5	2.8	65
	2. Shear walls	- 110		
	a. Concrete	4.5	2.8	160
	b. Masonry	4.5	2.8	160
	3. Light steel-framed bearing walls with tension-only bracing	2.8	2.2	65
	4. Braced frames where bracing carries gravity load			
	a. Steel	4.4	2.2	160
	b. Concrete <sup>3</sup>	2.8	2.2	_3
	c. Heavy timber	2.8	2.2	65
2. Building frame system	Steel eccentrically braced frame (EBF)	7.0	2.8	240
	2. Light-framed walls with shear panels	<del>-  ,</del>		1
	a. Wood structural panel walls for structures three stories or less	6.5	2.8	65
	b. All other light-framed walls	5.0	2.8	65
	3. Shear walls	- 1		
	a. Concrete	5.5	2.8	240
	b. Masonry	5.5	2.8	160
	4. Ordinary braced frames	10.0		100
	a: Steel <sup>6</sup>	5.6	2.2	35 <sup>6</sup>
	b. Concrete <sup>3</sup>	5.6	2.2	
	c. Heavy timber	5.6	2.2	65
	5. Special concentrically braced frames			
	la. Steel	6.4	2.2	240
3. Moment-resisting frame system	Special moment-resisting frame (SMRF)	- J. ,		2-70
	a. Steel	8.5	2.8	N.L.
	b. Concrete <sup>4</sup>	8.5	2.8	N.L.
	2. Masonry moment-resisting wall frame (MMRWF)	6.5	2.8	160
	3. Intermediate moment-resisting frame (IMRF) <sup>5</sup>	0.0		100
	a. Steel <sup>8</sup>	4.5	2.8	35 6
	b. Concrete <sup>5</sup>	5.5	2.8	3
	4. Ordinary moment-resisting frame (OMRF)	0.0		
	la. Steel	3.5	2.8	35 6
	b. Concrete <sup>8</sup>	3.5	2.8	- 3
	5. Special truss moment frames of steel (STMF)	6.5	2.8	240
4. Dual systems	1. Shear walls	0.0	2.0	
	a. Concrete with SMRF	8.5	2.8	N.L.
	b. Concrete with concrete IMRF <sup>5</sup>	6.5	2.8	
	c. Masonry with SMRF	5.5	2.8	160
	d. Masonry with concrete IMRF3	4.2	2.8	3
	e. Masonry with masonry MMRWF	6.0	2.8	160
	2. Steel EBF	<del>  "."</del>	2.5	,,,,,
	a. With steel SMRF	8.5	2.8	N.L.
	Special concentrically braced frames	<del>  5.5</del>		11.6.
	a. Steel with steel SMRF	7.5	2.8	N.L.
5. Cantilevered column building systems	Cantilevered column elements	2.2	2.6	35 <sup>/</sup>
6 Shear wall-frame interaction systems	1. Concrete <sup>8</sup>	5.5	2.8	160
7. Undefined systems	See Sections 1629.6.7 and 1629.9.2	1 3.3	2.0	160

N.L.-no limit

<sup>&#</sup>x27;See Section 1630.4 for combination of structural systems.

Basic structural systems are defined in Section 1629.6. Prohibited in Seismic Zones 3 and 4.

<sup>\*</sup>Includes precast concrete conforming to Section 1921.2.7.

\*Prohibited in Seismic Zones 3 and 4, except as permitted in Section 1634.2.

\*In Seismic Zones 3 and 4 steel IMRF's, OMRF's and steel ordinary braced frames are permitted as follows:

<sup>-</sup> Structures using steel IMRF's and OMRF's are permitted to a height of 35 feet where the total dead weight of the floors, walls and roof do not exceed 35 psf or for single-story buildings where the moment joints of field connections are constructed of boilted end plates and the dead load of the roof does not exceed 15 psf, the height is permitted to be increased to 60 feet.

<sup>-</sup> Steel ordinary braced frames are permitted in penthouse structures and in other one-story buildings or structures where the total dead weight of the roof does not exceed 15 psf, and the height of the building or structures does not exceed 60 feet.

<sup>&</sup>lt;sup>7</sup> Total height of the building including cantilevered columns.

<sup>°</sup>Prohibited in Seismic Zones 2A, 2B, 3 and 4. See Section 1633.2.7.

### (F) <u>Section 1630.8.2.2</u> – Detailing requirements in Seismic Zones 3 and 4.

Section 1630.8.2.2 – Detailing requirements in Seismic Zones 3 and 4 is hereby amended to:

In Seismic Zones 3 and 4, elements supporting discontinuous systems shall meet the following detailing or member limitations:

- 1. Reinforced concrete or reinforced masonry elements designed primarily as axial-load members shall comply with Section 1921.4.4.5.
- 2. Reinforced concrete elements designed primarily as flexural members and supporting other than light-frame wood shear wall systems or light-frame steel and wood structural panel shear wall systems shall comply with Sections 1921.3.2 and 1921.3.3. Strength computations for portions of slabs designed as supporting elements shall include only those portions of the slab that comply with the requirements of these sections.
- 3. Masonry elements designed primarily as axial-load carrying members shall comply with Sections 2106.1.12.4, Item 1, and 2108.2.6.2.6.
- 4. Masonry elements designed primarily as flexural members shall comply with Section 2108.2.6.2.5.
- 5. Steel elements designed primarily as flexural members or trusses shall have bracing for both top and bottom beam flanges or chords at the location of the support of the discontinuous system and shall comply with the requirements of AISC Seismic Part I, Section 9.4b.

### (G) <u>Section 1630.10.2</u> - Calculated

Section 1630.10.2 – Calculated is hereby amended to:

Calculated story drift using  $\Delta m$  shall not exceed 0.025 times the story height for structures having a fundamental period of less that 0.5 second. For structures having a fundamental period of 0.5 second or greater, the calculated story drift shall not exceed  $0.02/T^{\frac{1}{3}}$  times the story height.

(NOTE: Exceptions to remain unchanged.)

### (H) Section 2204.1 – Load and Resistance Factor Design.

Section 2204.1 - Load and Resistance Factor Design is hereby amended to:

Steel design based on load and resistance factor design method shall resist the factored load combinations of Section 1612.2 in accordance with the applicable requirements of Section 2205.

### (I) <u>Section 2204.2</u> – Allowable Stress Design.

Section 2204.2 – Allowable Stress Design is hereby amended to:

Steel design based on allowable stress design methods shall resist the factored load combinations of Section 1612.3 in accordance with the applicable requirements of section 2205.

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### (J) <u>Section 2205.3</u> – Seismic Design Provisions for Structural Steel.

Section 2205.3 - Seismic Design Provisions for Structural Steel is hereby amended to:

Steel structural elements that resist seismic forces shall, in addition to the requirements of Section 2205.2 be designed in accordance with Division IV.

(K) <u>Chapter 22, Division IV</u> - Seismic Provisions for Structural Steel Buildings of the American Institute of Steel Construction (June 15, 1992) is hereby deleted and replaced by Seismic Provisions for Structural Steel Buildings, of the American Institute of Steel Construction (AISC-Seismic). Parts I and III, dated April 15, 1997 and supplement No. 2 dated November 10, 2000.

The following terms that appear in AISC – Seismic shall be taken as indicated in the 1997 Uniform Building Code.

AISC-Seismic	1997 Uniform Building Code			
Seismic Force Resisting System	Lateral Force Resisting System			
Design Earthquake	Design Basis Ground Motion			
Load Combinations Eqs. (4-1) and (4-2)	Chapter 16 Eqs. (12-17) and (12-18) respectively			
LRFD Specification Section Eqs. (A4-1) through (A4-6)	Chapter 16 Eqs. (12-1) through (12-6) respectively			
$\varsigma_{ m o} { m Q}_{ m E}$	$E_{m}$			

### 1. Part I, Section 1 of the AISC – Seismic is revised as follows:

### 1. Scope

These provisions are intended for the design and construction of structural steel members and connections in the Seismic Force Resisting Systems in buildings for which the design forces resulting from earthquake motions have been determined on the basis of various levels of energy dissipation in the inelastic range of response. These provisions shall apply to buildings in Seismic Zone 2 with an importance factor I greater than one, in Seismic Zone 3 and 4 or when required by the Engineer of Record.

These provisions shall be applied in conjunction with, 1997 Uniform Building Code Chapter 22, Division II, hereinafter referred to as the LRFD Specification. All members and connections in the Lateral Force Resisting System shall have a design strength as provided in the LRFD Specification to resist load combinations 12-1 through 12-6 (in 1997 Uniform Building Code Chapter 16) and shall meet the requirements in these provisions.

Part I includes a Glossary, which is specifically applicable to this Part, and Appendix S.

2. Part 1, Section 4.1, first paragraph of the AISC – Seismic is revised as follows:

### 4.1 Loads and Load Combinations

The loads and load combinations shall be those in 1997 Uniform Building Code, Section 1612.2 except as modified throughout these provisions.

(L) Section 2320.11.3 – Conventional Construction (Bracing) (same as current code)

### Section 2320.11.3 is replaced to read as follows:

- 1. Braced wall lines shall consist of braced wall panels, which meet the requirements for location, type and amount of bracing specified in Table 23-1V-C-1 and are in line or offset from each other by not more than 4 feet (1219 mm).
- 2. Braced wall panels shall start at not more than 8 feet (2438 mm) from each end of a braced wall line.
- 3. All braced wall panels shall be clearly indicated on the plans.
- 4. Construction of braced wall panels shall be by one of the following methods:
  - 4.1 Wood boards of 5/8 inch (16 mm) net minimum thickness applied diagonally on studs spaced not over 24 inches (610 mm) on center.
  - 4.2 Wood structural panel sheathing with a thickness not less than 5/16 inch (7.9 mm) for 16 inch (406 mm) stud spacing and not less than 3/8 inch (9.5 mm) for 24 inch (610 mm) stud spacing in accordance with tables 23-11-A-1 and 23-1V-D-1.
  - 4.3 Fiberboard sheathing 4 foot by 8 foot (1219 mm by 2438 mm) panels not less than ½ inch (13 mm) thick applied vertically on studs spaced not over 16 inches (406 mm) on center when installed in accordance with Section 2315.6 and Table 23-11-J.
  - 4.4 Particleboard wall sheathing panels where installed in accordance with Table 23-1V-D-2.

### EXHIBIT "B-1"

## CITY OF SANTA CLARA JUSTIFICATION FOR MODIFICATIONS AND AMENDMENTS TO: THE UNIFORM BUILDING CODE [1997 Edition]

(A) **Sections 102 through 109 inclusive**. Administrative - Not adopted.

**Justification:** Contained in the Uniform Administrative Code.

(B) Section 904.1 - Fire Extinguishing Systems - Requires compliance with provisions

of Uniform Fire Code as adopted by the City of Santa Clara. Adds

further language, a clarification. (Same as present code.)

**Justification:** Eliminates any conflicts between the Uniform Building Code and

the Uniform Fire Code as amended by the City of Santa Clara.

(C) Section 1612.2.1 – Basic load combinations – To avoid reduction of the vertical seismic component (E<sub>v</sub>) by 0.9D which was not the intent of considering the vertical component in seismic calculations. The need for eliminating exception item 2 regarding the 1.1 factor for concrete and masonry is well documented in many engineering and trade journals.

**Justification:** 

Santa Clara is situated on alluvial soils between San Francisco Bay and the San Andreas Fault seismic zone. The City's location makes it particularly vulnerable to damage caused by seismic events. The relatively young geological processes that have created the San Francisco Bay Area are still active today. Seismically, the City sits between two active earthquake faults (San Andreas and the Hayward/Calaveras) and other potentially active faults. The amendment is necessary due to the geological condition of Santa Clara.

(D) Section 1629-4.2 – Seismic Zone 4 near source factor. Sections 9.6a and 9.6b of AISC – Seismic Part 1 exempts strong-column/weak-beam requirements under certain load conditions and configurations for steel special and intermediate moment frame. The amendment reflects the same requirements as in 1997 AISC-Seismic.

**Justification:** 

Santa Clara is situated on alluvial soils between San Francisco Bay and the San Andreas Fault seismic zone. The City's location makes it particularly vulnerable to damage caused by seismic events. The relatively young geological processes that have created the San Francisco Bay Area are still active today. Seismically, the City sits between two active earthquake faults (San Andreas and the Hayward/Calaveras) and other potentially active faults. The

amendment is necessary due to the geological condition of Santa Clara

(E) **Section 1629.6.1** – Table 16-N is amended to allow the use of ordinary moment frames and intermediate moment frames with certain limitations on height and dead load. The amendments also make it consistent with the adoption of 1997 AISC – Seismic Provisions and the latest supplement.

### Justification:

Santa Clara is situated on alluvial soils between San Francisco Bay and the San Andreas Fault seismic zone. The City's location makes it particularly vulnerable to damage caused by seismic events. The relatively young geological processes that have created the San Francisco Bay Area are still active today. Seismically, the City sits between two active earthquake faults (San Andreas and the Hayward/Calaveras) and other potentially active faults. The amendment is necessary due to the geological condition of Santa Clara.

(F) **Section 1630.8.2.2** - Detailing requirements in Seismic zones 3 and 4. The amendments make it consistent with the provisions in AISC – Seismic 1997 Part I, Section 8.3.

### **Justification:**

Santa Clara is situated on alluvial soils between San Francisco Bay and the San Andreas Fault seismic zone. The City's location makes it particularly vulnerable to damage caused by seismic events. The relatively young geological processes that have created the San Francisco Bay Area are still active today. Seismically, the City sits between two active earthquake faults (San Andreas and the Hayward/Calaveras) and other potentially active faults. The amendment is necessary due to the geological condition of Santa Clara.

(G) **Section 1630.10.2** - The calculated story drift is amended to correct consideration when checking for building drift. The proposed modification was recommended by the SEAOC Seismology Committee. It effectively makes the descending branch vary with  $1/T^{\frac{1}{3}}$  for drift coordination purposes and make the drift limitations very similar to those of the 1994 UBC.

The change from 0.7 seconds to 0.5 seconds in the proposal is needed to avoid a step function in the drift limit. If 0.7 second were retained, the drift limit at T just below 0.7 seconds would have been different from the drift limit just above 0.7 seconds. With the switch to 0.5 seconds the drift limit just below T = 0.5 seconds is the same as the drift limit just above T = 0.5 seconds.

### Justification:

Santa Clara is situated on alluvial soils between San Francisco Bay and the San Andreas Fault seismic zone. The City's location makes it particularly vulnerable to damage caused by seismic events. The relatively young geological processes that have created the San Francisco Bay Area are still active today. Seismically, the City sits

between two active earthquake faults (San Andreas and the Hayward/Calaveras) and other potentially active faults. The amendment is necessary due to the geological condition of Santa Clara.

(H) **Section 2204.1** - Load and Resistance Factor Design. Revision to make it consistent with the adoption of 1997 AISC – Seismic Provision and latest supplements. It has incorporated the most recent findings from the FEMA funded SAC Reports.

### **Justification:**

Santa Clara is situated on alluvial soils between San Francisco Bay and the San Andreas Fault seismic zone. The City's location makes it particularly vulnerable to damage caused by seismic events. The relatively young geological processes that have created the San Francisco Bay Area are still active today. Seismically, the City sits between two active earthquake faults (San Andreas and the Hayward/Calaveras) and other potentially active faults. The amendment is necessary due to the geological condition of Santa Clara.

(I) Section 2204.2 - Allowable Stress Design. Revision to make it consistent with the adoption of 1997 AISC – Seismic Provision and latest supplements. It has incorporated the most recent findings from the FEMA funded SAC Reports.

### **Justification:**

Santa Clara is situated on alluvial soils between San Francisco Bay and the San Andreas Fault seismic zone. The City's location makes it particularly vulnerable to damage caused by seismic events. The relatively young geological processes that have created the San Francisco Bay Area are still active today. Seismically, the City sits between two active earthquake faults (San Andreas and the Hayward/Calaveras) and other potentially active faults. The amendment is necessary due to the geological condition of Santa Clara.

(J) Section 2205.3 - Seismic Design Provisions for Structural Steel. Chapter 22, Division V is deleted. The current 1997 UBC is based on the outdated 1992 AISC seismic provisions. The proposal makes it consistent with the current practice that is based on the 1997 AISC Seismic.

#### **Justification:**

Santa Clara is situated on alluvial soils between San Francisco Bay and the San Andreas Fault seismic zone. The City's location makes it particularly vulnerable to damage caused by seismic events. The relatively young geological processes that have created the San Francisco Bay Area are still active today. Seismically, the City sits between two active earthquake faults (San Andreas and the Hayward/Calaveras) and other potentially active faults. The amendment is necessary due to the geological condition of Santa Clara

(K) Chapter 22, Division IV - Seismic Provisions for Structural Steel Buildings is revised to make the code provisions consistent with current practice that is based on the 1997 AISC Seismic with the subsequent supplement printed afterward.

### Justification:

Santa Clara is situated on alluvial soils between San Francisco Bay and the San Andreas Fault seismic zone. The City's location makes it particularly vulnerable to damage caused by seismic events. The relatively young geological processes that have created the San Francisco Bay Area are still active today. Seismically, the City sits between two active earthquake faults (San Andreas and the Hayward/Calaveras) and other potentially active faults. The amendment is necessary due to the geological condition of Santa Clara.

(L) **Section 2320.11.3** - Conventional Construction (Bracing) – Limits the use of gypsum wallboard and exterior plaster for lateral bracing.

### **Justification:**

Santa Clara is situated on alluvial soils between San Francisco Bay and the San Andreas Fault seismic zone. The City's location makes it particularly vulnerable to damage caused by seismic events. The relatively young geological processes that have created the San Francisco Bay Area are still active today. Seismically, the City sits between two active earthquake faults (San Andreas and the Hayward/Calaveras) and other potentially active faults. The amendment is necessary due to the geological condition of Santa Clara. Gypsum wallboard and exterior portland cement plaster have performed poorly during recent California seismic events. The shear values for gypsum wallboard and portland cement stucco contained in the code are based on mono-directional testing. It is appropriate to limit the use of these products until cyclic loading testing are performed and evaluated using a more restrictive standard which will better prevent damage which can result from local conditions. Exceptions may be granted by the Building Official on a case-by-case basis. (Same as present code.)

(M) 1997 UBC Appendix Chapter 3, Division II, Agricultural Buildings. Adopted

Provides standards for construction of agricultural buildings. (Same as present code.)

(N) **1997 UBC Appendix Chapter 4, Division I** – Barriers for Swimming Pools, Spas and Hot Tubs. Adopted.

Provides standards for barriers for swimming pools, spas and hot tubs. (Same as present code.)

(O) 1997 UBC Appendix Chapter 18 – Water and Damp Proofing Foundations. Adopted.

Provides standards for waterproofing and damp proofing retaining walls and floors below grade. (Same as present code.)

(P) 1997 UBC Appendix Chapter 31, Division II, Membrane Structures. Adopted.

Provides standards for construction and use of air-supported, air-inflated and membrane-covered cable or frame structures. (Same as present code.)

(Q) 1997 UBC Appendix Chapter 31, Division III, Patio Covers. Adopted.

Provides standards for patio covers and patio enclosures. (Same as present code.)

(R) 1997 UBC Appendix Chapter 33 - Permits Required (Grading)

Requires permits for grading operations when required by Zoning Ordinance and will control isolated excavations where no building permit is required. (Same as present code).

<u>Justification:</u> Administrative – Zoning Ordinance does not establish grading terminology or fees. This would complement Section 37-6 of Zoning Ordinance #1204, requiring a construction permit to establish, construct, etc. any off-street parking facility.

(S) 1997 UBC Appendix Chapter 34, Division III – Repairs to buildings. Adopted.

Provides a defined level of repair for buildings damaged by a natural disaster. (Same as present code.)

### EXHIBIT "C"

### CITY OF SANTA CLARA MODIFICATIONS AND AMENDMENTS TO: THE NATIONAL ELECTRIC CODE [1999 Edition]

The following amendment is a part of the National Electric Code, 1999 Edition.

(A) Article 90-4. Enforcement. Not adopted.

### EXHIBIT "C-1"

## CITY OF SANTA CLARA JUSTIFICATION FOR MODIFICATIONS AND AMENDMENTS TO: THE NATIONAL ELECTRIC CODE [1999 Edition]

(A) **Section 90-4 Enforcement**. Administrative - Not adopted.

**Justification:** Contained in Uniform Administrative Code.

### EXHIBIT "D"

### CITY OF SANTA CLARA MODIFICATIONS AND AMENDMENTS TO: THE UNIFORM HOUSING CODE [1997 Edition]

The following amendments are a part of the Uniform Housing Code, 1997 Edition.

(A) <u>Chapters 1, 2, 3, 8, 9, 10, 11, 12, 13, 14, 15 and 16, and Section 701.1 inclusive.</u> Not adopted.

### EXHIBIT "D-1"

## CITY OF SANTA CLARA JUSTIFICATION FOR MODIFICATIONS AND AMENDMENTS TO: THE UNIFORM HOUSING CODE [1997 Edition]

(A) <u>Chapters 1, 2, 3, 8, 9, 10, 11, 12, 13, 14, 15 and 16, and Section 701.1 inclusive.</u> Not adopted.

**Justification:** Contained in Uniform Administrative Code. In accordance with the state Department of Housing and Community Development, only chapters 4, 5, 6 and Sections 701.2 and 701.3 are applicable for the enforcement by local enforcement agencies.

### **EXHIBIT "E"**

### CITY OF SANTA CLARA MODIFICATIONS AND AMENDMENTS TO: THE UNIFORM MECHANICAL CODE [2000 Edition]

The following amendments are a part of the Uniform Mechanical Code, 2000 edition.

(A) <u>Sections 104 through 117, inclusive.</u> Administrative. Not adopted.

### EXHIBIT "E-1"

## CITY OF SANTA CLARA JUSTIFICATION FOR MODIFICATIONS AND AMENDMENTS TO: THE UNIFORM MECHANICAL CODE [2000 Edition]

(A) **Sections 104 through 117 inclusive**. Administrative - Not adopted.

**Justification:** Contained in Uniform Administrative code.

### EXHIBIT "F"

### CITY OF SANTA CLARA MODIFICATIONS AND AMENDMENTS TO: THE UNIFORM PLUMBING CODE [2000 Edition]

The following modifications and amendments are a part of the Uniform Plumbing Code, 2000 Edition. They are to add to, replace, or supersede the respective sections and subsections appearing in said Code prior to such modifications.

- (A) Sections 102 through 103.6 inclusive. Administrative Not adopted.
- **(B)** Section 413.1 through 413.3, inclusive. Fixture count Not adopted.
- (C) <u>2000 UPC Appendix A</u>, Rules for Sizing Water Systems. Adopted.
- (D) <u>2000 UPC Appendix B</u>, Combination Waste and Vent Systems. Adopted.
- (E) <u>2000 UPC Appendix C</u>, Additional Referenced Standards. Adopted.
- (F) <u>2000 UPC Appendix D</u>, Rainwater Systems. Adopted.

### EXHIBIT "F-1"

## CITY OF SANTA CLARA JUSTIFICATION FOR MODIFICATIONS AND AMENDMENTS TO: THE UNIFORM PLUMBING CODE [2000 Edition]

(A) Section 102 through 103.6, inclusive. Administration - Not adopted.

**Justification:** Contained in Uniform Administrative Code.

(B) **Section 413.1 through 413.3, inclusive**. Fixture count – Not adopted.

**Justification:** Fixture count is covered in the Uniform Building code. Eliminates

any conflicts between the Uniform Building Code and the Uniform

Plumbing Code. (Same as present code.)

(C) **2000 UPC Appendix A**, Rules for Sizing Water Systems. Adopted.

Provides standard for sizing water systems.

(D) **2000 UPC Appendix B**, Combination Waste and Vent Systems. Adopted.

Provides standards for combination waste and vent systems.

(E) **2000 UPC Appendix** C, Additional reference standards.

Provides other applicable standards not listed in Table 14-1.

(F) **2000 UPC Appendix D**, Rainwater Systems. Adopted.

Provides standards for rainwater systems.

### **EXHIBIT "G"**

## CITY OF SANTA CLARA MODIFICATION AND AMENDMENTS TO: THE UNIFORM CODE FOR THE ABATEMENT OF DANGEROUS BUILDINGS PER [1997 Edition]

The following amendments are a part of the Uniform Code for the Abatement of Dangerous Buildings, 1997 edition.

(A) SECTION 203 through 205.2, inclusive - Administrative. Not adopted.

### EXHIBIT "G-1"

# CITY OF SANTA CLARA JUSTIFICATION FOR MODIFICATIONS AND AMENDMENTS TO: THE UNIFORM CODE FOR THE ABATEMENT OF DANGEROUS BUILDINGS [1997 Edition]

(A) Section 203 through 205.2 inclusive. Administrative. Not adopted.

**Justification:** Contained in Uniform Administrative Code.